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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently amended) A process for the synthesis of compounds of formula I:

$$R_4$$
 R_3
 R_2
 R_1

wherein

R is hydrogen;

R₁[[,]] and R₂ are each, independently, selected from the group consisting of hydrogen, alkyl of 1-6 carbon atoms, alkoxy of 1-6 carbon atoms, halogen, fluorinated alkyl of from 1 to 6 carbon atoms, -CN, -NH-SO₂-alkyl of 1-6 carbon atoms, -SO₂-NH-alkyl of 1-6 carbon atoms, alkyl amide of 1-6 carbon atoms, amino, alkylamino of 1-6 carbon atoms, dialkylamino of 1-6 carbon atoms per alkyl moiety, fluorinated alkoxy of 1-6 carbon atoms, acyl of 2-7 carbon atoms, and aroyl or aroyl, preferably phenoyl or thiophenoyl;

R₃[[,]] and R₄ are each independently selected from the group consisting of hydrogen, C₁-C₆ alkyl, cycloalkyl of from 3 to 7 carbon atoms and of -CH₂-cycloalkyl of from 3 to 7 carbon atoms;

wherein the dashed line indicates an optional double bond; the process comprising the steps of:

a) acylating a benzodiazepine compound of the formula:

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to give an acylated benzodiazepine of the formula:

wherein R' represents represents alkyl of from 1 to 10 carbon atoms, preferably 1 to 6 carbon atoms, or a benzyl or napthyl group;

b) reacting the acylated benzodiazepine of step a) with a nitrosating agent to provide an acylated nitroso benzodiazepine compound of the formula:

c) reducing the acylated nitroso benzodiazepine compound of step b) to yield an acylated 1-aminobenzodiazepine compound of the formula

d) allowing the acylated 1-aminobenzodiazepine compound of step c) to react with a cyclopentanone compound of the formula:

to provide a cyclopentylideneamino benzodiazepine compound of the formula:

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$$R_2$$
 N
 N
 R_3
 R_4

e) reacting the cyclopentylideneamino benzodiazepine compound of step d) to provide an acylated compound of the formula:

$$R_3$$
 R_4 R_2 ; and either

f) deacylating the acylated compound of step e) to provide a compound of the formula:

which may optionally be reduced; or

g) reducing the acylated compound of step e) to provide a <u>reduced acylated</u> compound of the formula:

and h) deacylating the <u>reduced acylated</u> compound of <u>this</u> step g) to provide a compound of the formula:

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$$R_3$$
 R_4 R_2 R_1

2. (Currently amended) A process of Claim 1 for the production synthesis of a compounds of the formula:

comprising the steps a) through f) of Claim 1, wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

3. (Currently amended) The process of Claim 2 with an additional further comprising the step of reducing the compound of the formula:

to produce a compound of the formula:

$$R_3$$
 R_4 R_2 R_1

wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

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4. (Currently amended) [[A]] The process of Claim 3 further comprising the step of alkylating the compound of the formula:

wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, to provide an alkylated compound of the formula:

wherein R is an alkyl group of from 1 to 6 carbon atoms.

5. (Currently amended) [[A]] The process according to of Claim 1 comprising the steps a) through e) of Claim 1 to provide an acylated compound of the formula:

followed by reduction of and further comprising reducing the acylated compound to provide a reduced acylated compound of the formula:

and deacylation of deacylating the reduced acylated compound to provide a compound of the formula:

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wherein R₁, R₂, R₃, and R₄ are as defined in Claim 1.

6. (Currently amended) [[A]] <u>The</u> process of Claim 5 further comprising the step of alkylating the compound of the formula:

$$R_3$$
 R_2 R_1

wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, to provide an alkylated compound of the formula:

wherein R is an alkyl group of from 1 to 6 carbon atoms and R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

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7. (Currently amended) [[A]] <u>The process of Claim 1 comprising the steps a</u>) through f) of Claim 1 to produce a compound of the formula:

wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, and further comprising the step of alkylating the compound to produce an alkylated compound of the formula:

wherein R is an alkyl group of from 1 to 6 carbon atoms and R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

- 8. (Currently amended) [[A]] The process of Claim 1 wherein R is hydrogen and R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.
- 9. (Currently amended) [[A]] The process of Claim 1 wherein R, R_1 and R_3 are hydrogen and R_2 and R_4 are as defined in Claim 1.
- 10. (Currently amended) [[A]] The process of Claim 1 wherein R, R_1 , R_2 , R_3 , and R_4 are each hydrogen.